

REMARKS

Entry of the Supplemental Preliminary Amendment prior to examination on the merits is requested. Claims 1-54 were pending in the application. In the Preliminary Amendment, claims 1-50 are canceled and new claims 55-186 are added. These claims place the application in better form for examination, and are supported by the originally filed disclosure. Claims 51-186 are now pending for consideration by the examiner. The specification and drawings are also amended to correct minor informalities. No new matter is added.

If there are any questions regarding the application or if an examiner's amendment would facilitate the allowance of one or more of the claims, the examiner is invited to contact the undersigned attorney at the local number below.

Respectfully submitted,

Kbvc 2, 2007

Date

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Attached: Attachment A

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Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge deposit account No. 19-0741 for any such fees; and applicant hereby petitions for any needed extension of time.
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ATTACHMENT A

Marked up version of specification changes made in Preliminary Amendment filed on November 1, 2001

Page 10, second full paragraph (lines 14-35)

The virtual hybrid network serves a similar purpose to transformer hybrid couplers in early telephony, i.e., 4-wire to 2-wire conversion, specifically herein to separate first signalling as transmitted by the master from second signalling by the reflection signals coming back to the master 11 according to deliberate reflection action at the nodes. In addition, associated differential amplifier 481 will have output 482 corresponding to difference in voltage between its inputs 483 and 484. Resistors 485 and 486 have the same value as resistor [44] 45 which matches the transmission line impedance, and will result in the same 2:1 divider action at differential amplifier inputs 483, 484. In absence of any reflection signals, the differential amplifier 481 would have inputs of equal voltage and phase, thus give zero output. However, whatever reflection signal component arrives back at the master from the transmission line will increase or decrease voltage on the line 484 compared with the voltage on the line 483 from between the resistors 485, 486 and output 482 from the differential amplifier 481 will show the difference. In principle, i.e., other than for noise etc, differential amplifier output 482 tracks the reflection components, the transmitted output signal having effectively been removed.

Page 13, first full paragraph (lines 6-15)

Figure 5 shows three-level output data pulse generation for preferred three-level signalling, see fixed clock 51, phase-lock loop 52, selective divider 53, specific divide-by-3 dividers 54A to the phase lock loop 52 and 54B to bit signal format time setting 55, coincidence gate 56 for coordinating bit excursions (X,Y) with input binary data values and controlling production at 57 of positive and negative voltages applied to [biased] biased base of output transistor 58 through switch [58] 59 controlled by output from time setting 55 to be turned off during the interval (Z) following the bit value representing bipolar excursions (X,Y).

